



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

27 JUL 1993

OFFICE OF THE
REGIONAL ADMINISTRATOR

CERTIFIED MAIL NO. P 243 065 039
RETURN RECEIPT REQUESTED

Dr. Ada Deer
Assistant Secretary - Indian Affairs
Bureau of Indian Affairs
United States Department of the Interior
M.S. 4140-MIB
1849 C Street, N.W.
Washington, D.C. 20240

Re: REQUEST FOR PAYMENT OF EPA COSTS
Bluewater Uranium Site (Navajo)
Superfund Removal Site No. 9TW3
Near Bluewater and Prewitt, New Mexico

Dear Dr. Deer:

I am writing in regard to cost sharing for the emergency response cleanup at the Bluewater Superfund Site.

BACKGROUND

On November 15 and 16, 1990, the EPA conducted a preliminary radiological assessment at several abandoned uranium mining pits located on three Native American Allottee parcels near Bluewater and Prewitt, New Mexico. Based on this assessment, EPA subsequently determined that the release of gamma radiation and hazardous substances from the pits presented an imminent and substantial danger to public health, welfare and the environment. A nearby Department of Energy parcel and a Cerrillos Land Company parcel were found to pose a similar threat. EPA made this determination pursuant to the authority contained in § 104 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), as amended, 42 U.S.C. § 9604.

Later that month, on November 21, the Agency for Toxic Substances and Disease Registry (ATSDR) issued a Public Health Advisory which identified serious potential radiological hazards affecting the health of the Native Americans living in the immediate area of the Site. ATSDR recommended that this area be evaluated for inclusion on the National Priorities List (NPL) for remedial or removal activities.

Prior to commencing an emergency response action, EPA and DOI worked together planning all the facets of the proposed response including the sharing of the response costs. Your staff

Attachment A

assured EPA that DOI would contribute a significant amount of funding by means of an interagency agreement. However, a last minute problem arose at the BIA headquarters level which, for reasons unknown to EPA, precluded DOI from signing the IAG at that time.

Due to the imminent and substantial nature of the endangerment posed by the Site, EPA determined that it was necessary to begin the cleanup before resolving the cost sharing issue. EPA conducted an emergency response action on the Native American Allottee parcels between August 12, 1991, and September 21, 1991. The total cost incurred by EPA for the work completed on the Native American Allottee parcels was \$581,521.44.

On October 2, 1991, the EPA responded to a letter by Mr. Ed Cassidy, DOI's Deputy Assistant Secretary for Policy, Management, and Budget, regarding this matter. The EPA indicated at that time that we would like to reach a mutually agreeable solution with DOI for sharing the costs of this cleanup.

PROPOSAL

Over one year has passed since the removal ended, and the cost sharing issue has not been resolved. I propose that we share equally the cost of cleaning up the three Native American Allottee Parcels at Bluewater. Since the total cost for the cleanup was \$581,521.44, we request that the Department of the Interior contribute \$290,760.22 as reimbursement for the cleanup at the three Native American Allottee Parcels. Please find enclosed a summary of the events which took place and EPA's Site Cost Recovery Documentation.

Please make arrangements for payment within thirty (30) calendar days. If you wish to discuss this matter, please call me at (415) 744-1001, or contact Jeff Zelikson, the Director of Region IX's Hazardous Waste Management Division, at (415) 744-1730. For your information, all checks should be made payable to the "U.S. EPA Hazardous Substance Superfund" established pursuant to CERCLA in Title 26, Chapter 98, of the Internal Revenue Code, and sent to:

U.S. EPA - Region 9
ATTN: Superfund Accounting
P.O. Box 360863M
Pittsburgh, PA 15251

A check and accompanying transmittal letter should clearly reference the identity of the Site as:

Bluewater Uranium Site
(Navajo) Superfund Removal Site No. 9TW3
Near Bluewater and Prewitt, New Mexico

We also request that a copy of your check and transmittal letter, and any general questions you may have be directed to:

William J. Weis III
Removal Enforcement Section, H-8-4
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-2297

If you have any technical questions regarding the removal activities, please contact:

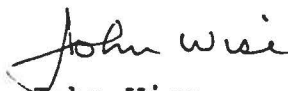
Terry Brubaker, Chief
Emergency Response Section, H-8-3
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-2293

If you have any legal questions regarding this request for cost reimbursement, please contact:

Linda Wandres
Senior Attorney for Indian Law Matters
Office of Regional Counsel, RC-1
U. S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-1359

Thank you for your time and attention to this matter.

Sincerely,



John Wise
Acting Regional Administrator

ENCLOSURES

cc: Sally Seymour, Director
USEPA Superfund Enforcement Division

ENCLOSURE 1

DETAILED BACKGROUND REGARDING EPA'S RESPONSE EFFORT AT THE BLUEWATER SITES

I. Location and Description of the Sites

The Bluewater Uranium Mining Sites are located in the central portion of western New Mexico, approximately five miles west of Prewitt, New Mexico and 15 miles north of Grants, New Mexico. The Bluewater Sites consist of three nearby abandoned mining areas: the Brown-Vandever Mining Site, the Brown-Nanabah Mining Site, and the Navajo-Desiderio Mine. The Brown-Vandever and Brown-Nanabah Mining Sites are situated on four separate parcels of land, which include two Indian allotment parcels (administered by the Bureau of Indian Affairs [BIA]), one privately owned parcel (the mineral rights to which are owned by a subsidiary of the Santa Fe Pacific Railroad Company), and one Federal parcel, which is administered by DOE. The Desiderio Mining Site consists of one additional parcel of Indian allotment property. Together, the Sites encompass approximately 155 acres of land.

II. Historic and Present Use of the Sites

In the past, the land at the Bluewater Sites was used primarily for rangeland grazing and uranium mining. Reports indicate that mining operations at the Brown-Vandever and Brown-Nanabah Mining Sites began in the early 1950's, following a Navajo shepherd's discovery of uranium-bearing outcrops at the foot of Haystack Butte. Mining operations continued at the Bluewater Sites for approximately 30 years. These operations included both open pit surface mining and underground mining through numerous mine shafts in and around Haystack Butte. The overburden which was blasted and removed from the ground in the open pit mining operations was typically dumped in large waste piles near the pits. Furthermore, the subsurface miners frequently created additional piles of uranium-containing waste from mined ore that had been brought to the surface, but was later judged to have a uranium content too low for milling.

Mining operations at the Bluewater Sites ceased in 1981, when the worldwide price of uranium fell to a level that made continued mining unprofitable throughout the Grants-Ambrosia Lake district. To EPA's knowledge, few formal reclamation efforts were undertaken to dispose of the mining wastes at the Sites following the cessation of mining activities. Instead, the mine tailings and other mining wastes at the Sites have remained on the land, virtually untouched, until the present time. The dry climate and lack of chemical weathering at the Sites has contributed to the longevity of the waste piles.

Since 1981, the land at Bluewater has been utilized primarily for the grazing of sheep and other animals. Several Navajo families, including approximately 40 individuals, presently live and graze their livestock within 1/4 mile of the Brown-Vandever and Brown-Nanabah Sites. Moreover, it has been reported that local children often play in the mined areas, and have been seen climbing on and about the piles of abandoned uranium mine waste.

Until recently, there were no restrictions or barriers to prevent the local population or livestock from gaining access to the abandoned mine areas and mining wastes at the Sites. As will be discussed below, however, within the last two years, EPA has taken action to cover and restrict access to all areas on the five Bluewater parcels that were found to present a serious threat to public health, welfare, and the environment.

III. Identification of Health Hazards at the Sites

EPA Region 9 first became aware of the potential health hazards at the Bluewater Mining Sites in October 1990. On October 3, the Agency for Toxic Substances and Disease Registry (ATSDR) notified the Region 9 Emergency Response Section (ERS) of potential health hazards that ATSDR had determined might be associated with the abandoned uranium mines at the Brown-Vandever, Brown-Nanabah, and Navajo-Desiderio Mining Sites. Following several Site visits, and after collecting a limited amount of data, ATSDR issued a Public Health Advisory concerning the Sites on November 21, 1990, pursuant to Section 104(i)(6)(H) of CERCLA. ATSDR issued this Health Advisory (Attachment 1) to the Bureau of Indian Affairs (BIA), EPA, the Indian Health Service (IHS), the Navajo Nation, the State of New Mexico, and the general public. The area of land covered by the Public Health Advisory consisted of the five parcels referenced above, and thus included the Brown-Vandever, Brown-Nanabah and Navajo-Desiderio allotments.

The Public Health Advisory concluded that the Bluewater Mining Sites may pose a significant threat to human health because of the presence of radioactive mine waste and protore on and about the Sites, physical hazards at the Sites, and the potential for heavy metal contamination in the vicinity of the abandoned mines. The Advisory recommended that EPA conduct follow-up data collection activities promptly to determine the extent of the health threat posed by the Sites. Finally, the Advisory concluded that if EPA's data confirmed that an imminent radiation health hazard existed at the Sites, EPA should take appropriate remedial action "in the most expeditious manner" to mitigate the endangerment that the Sites pose to area residents.

IV. EPA's Site Assessment Effort at the Bluewater Sites

Following ATSDR's initial contact with EPA in October 1990, the Region 9 Emergency Response Section was tasked to assess the present radiological and geochemical conditions at the Bluewater Sites. The goal of EPA's effort was to determine whether an emergency response action was warranted to control the actual or threatened release of hazardous substances at the Sites. On November 15-16, 1990, the ERS staff (assisted by staff from the EPA Office of Air and Radiation in Washington, D.C.) conducted a Site assessment on the five Bluewater parcels.

As part of this assessment, the ERS staff conducted a field gamma survey, taking measurements at both waist and ground levels. Waist level radiation measurements are indicative of human exposure levels, whereas ground level contact measurements suggest the emission rate of radioactive materials from the soil. In addition to the radiation survey, the ERS staff also collected water and soil samples on and about the Sites to test for the presence of radionuclides and heavy metal contamination. All ERS activities were coordinated with ATSDR, IHS, and the Navajo Superfund Program.

The ERS staff found that the radiation levels in the vicinity of the Sites greatly exceeded background levels. While ground level background readings were found to range from 11 to 20 microroentgens per hour (Ur/hr), ground level readings of over 1,000 Ur/hr were recorded on-Site. Similarly, waist-level measurements of up to 750 Ur/hr were recorded in the immediate vicinity of the Sites, whereas background levels had been found to range from 11 to 15 Ur/hr. In addition, elevated concentrations of radium and uranium isotopes were also detected in on-Site soils at levels up to 260 and 300 picocuries per gram of soil (Pci/g), respectively. The Site assessment data obtained by EPA are documented in the Preliminary Assessment Gamma Survey and Laboratory Data Report for the Bluewater Sites (Attachment 2). Once EPA had obtained the data for the Sites, the Agency immediately disseminated its findings to DOI and the other Federal and Tribal agencies that had received copies of the ATSDR Public Health Advisory.

V. Creation of an Interagency Task Force to Determine the Appropriate Response Action at the Bluewater Sites

On January 30, 1991, three DOI Environmental Affairs Officers (Ray Churan from Albuquerque, Bill Allen from San Francisco, and Mary Josie Smith from Washington) met with several representatives from the EPA Region 9 Field Operations Branch (including Branch Chief Don White, Emergency Response Section Chief Terry Brubaker, Removal Enforcement Section Chief Caroline Ireson, and other ERS staff members) to discuss the Bluewater Sites. At that meeting, the DOI group proposed that an Inter-

agency Task Force be established, to ensure close coordination and cooperation among all of the Federal and Tribal agencies that would be involved in the response activities at the Sites. EPA strongly supported DOI's recommendation to create an Interagency Task Force, and all who were present at the meeting confirmed their interest and commitment to work together to resolve the problems at Bluewater. As discussed below, all five Bluewater parcels were subsequently remediated within the framework established by this Task Force.

Following EPA's compilation of data from the Bluewater Sites, DOI convened a second meeting of the agencies involved in the Bluewater response effort in Albuquerque on April 8, 1991. The purpose of that meeting was to discuss possible response options for the Bluewater Sites. Although EPA was not able to attend this meeting (due to severe travel restrictions), DOI, BIA, IHS, and BLM met as planned to discuss the overall situation. Those agencies concluded that based on the data obtained at the Sites, an emergency response action was both necessary and appropriate. The Task Force members who were present at the meeting also decided that of all of the Federal agencies involved, only EPA could respond to the danger posed by the Sites in a timely and effective manner.

Immediately following the April 8 meeting, DOI informed EPA of the conclusions reached at that meeting. At that time, DOI representatives also told EPA Region 9 that the Department would be able to provide at least some portion of the funding necessary to conduct response activities on the allotted portion of the Bluewater Sites. However, DOI further stated that it would likely take a considerable amount of time for the Department to secure the funding in question, and transfer those funds to EPA. Overall, however, DOI assured EPA in the late spring of 1991 that funding would be forthcoming from the Department to support the Bluewater response effort.

Thereafter, in a memorandum dated May 24, 1991 (Attachment 3), DOI invited all of the agencies that were involved in the response effort to meet in Grants, New Mexico on June 3, 1991. The stated purpose of that meeting was to:

- 1) Visually inspect the abandoned uranium mining areas referenced in the ATSDR Public Health Advisory;
- 2) Discuss the data obtained by EPA during its Site assessment effort;
- 3) Determine the "Time Critical Actions" that EPA could take to address the health and safety concerns identified at the Sites; and

- 4) Explore cooperative Federal Agreements to accomplish these "Time Critical Actions."

The representatives of the various agencies met as scheduled on June 3, 1991. Ten of the individuals present at that meeting were there on behalf of either DOI or BIA. Following a discussion of the Site assessment data, the agencies involved in the response effort reached a consensus regarding the response effort to be conducted at the Sites. A summary of the response activities that the Federal and Tribal agencies agreed upon for the Bluewater parcels is set forth below:

- Phase 1:** Apply an earthen cover to reduce gamma radiation emissions and potential radionuclide migration from each parcel.
- Phase 2:** Fill, seal, and cap mine adits, inclines and ventilation shafts to reduce the migration of radon gas from such openings.
- Phase 3:** Revegetate reclaimed areas and post warning signs as necessary.

By early June, the Interagency Task Force had also reached a general agreement concerning the role that each agency would assume with respect to the emergency response action at the Sites. Specifically, the parties agreed as follows:

Removal # 1: The DOE held Parcel: Sec. 13, T 13N, R 11W. DOE informed the Interagency Task Force that it would assume responsibility as the Federal On-Scene Coordinator of the DOE/Federally held land. DOE would urge its lessee, George Warnock, President of Todilto Exploration and Development Corporation, to remediate the land. This failing, DOE would conduct the response itself or enter into an Interagency Agreement (IAG) with EPA, through which the EPA would remediate the DOE parcel, and DOE would reimburse the EPA for Site response costs.

Removal # 2: The Privately held Parcel: Sec. 19, T 13N, R 10W. The EPA informed the Interagency Task Force that it would assume responsibility as Federal On-Scene Coordinator of the privately held land. EPA would conduct a search of available information to determine the past and present owners (i.e., potentially responsible parties, PRPs) with respect to the Site. If any PRPs were identified, EPA would issue an Administrative Order under Section 106 of CERCLA, which would require those parties to perform specified response actions at the Site. If no viable PRPs were identified, it was agreed that EPA would conduct the response action itself, with the cost of remediation to be borne by the Superfund.

Removal # 3: The Three Native American Allottee Parcels:
Sec. 18, T 13N R 10W, Allottee 077031, Brown Vandever;
Sec. 24, T 13N R 11W, Allottee 059419, Nanabah Vandever;
Sec. 26, T 13N R 10W, Allottee 059387, John Desiderio.

Since their first meeting in January 1991, DOI and EPA had agreed to work together expeditiously to remediate the hazardous substances present on the three Native American Allottee parcels. At the June 3 meeting, EPA informed the Interagency Task Force that it would undertake a PRP search for any former, viable mining company operators with respect to the allotment parcels. If any PRPs were identified, EPA would issue an administrative order under Section 106 of CERCLA, which would require those parties to conduct the response activities at the Sites. If no viable PRPs could be identified, however, both agencies pledged their intent to enter into an Interagency Agreement for the response effort, through which they would share the cost of the Emergency Response Action on the three Native American allottee parcels.

VI. EPA's Determination of Threats to Public Health, Welfare and the Environment

Radiation is a known carcinogen, mutagen, and teratogen. Exposure to elevated gamma radiation is known to cause cancer, cataracts, and shorten the life span of affected individuals. Moreover, uranium and several of its decay daughters are alpha emitters. The inhalation of radionuclides that are alpha emitters exposes an affected individual's internal organs to damaging alpha radiation. Furthermore, once ingested, alpha emitters may become trapped within the body and can cause severe organ damage as well as certain genetic defects.

Based on the data obtained by ATSDR and the EPA Emergency Response Section, and subsequent discussions between ERS, ATSDR, and the EPA Office of Air and Radiation, Region 9 concluded that the release and threatened release of hazardous substances from the uranium mine pit surfaces, mining overburden, and abandoned ore debris at the Bluewater Sites presented an imminent and substantial endangerment to public health, welfare, and the environment.

The Region's conclusion was formally stated in an Action Memorandum dated June 7, 1991, which was approved by the Hazardous Waste Management Division Director on June 13, 1991 (Attachment 4). Through that Action Memorandum, the Region determined that a removal action was necessary: (1) to reduce surface emissions of gamma radiation at the Sites to less than 165 ur/hr (150 ur/hr above background levels), in accordance with the recommendations of the National Council on Radiation Protection and Measurements (NCRP); and (2) to restrict public access to the Sites through the posting of warning signs.

Due to the serious potential health hazards associated with the radiation and radionuclide levels found at the Sites, EPA concluded that the proposed removal action should begin as soon as possible.

While the EPA Action Memorandum focused primarily on the threat that the Bluewater Sites posed to human health and welfare, the Memorandum also concluded that the elevated emissions of gamma radiation and the radionuclides that were present at the Sites might adversely effect the local biota and wildlife. Moreover, the Action Memorandum noted that since the land in question was being utilized primarily for grazing purposes, radionuclides in the soil might be entering the food chain, as grazing livestock ingest contaminated biota. The memorandum concluded that over a period of time, this food chain link might prove to have deleterious consequences, not only for the livestock involved, but also for the individuals who eat animals that have grazed in the vicinity of the Sites.

VII. EPA's Response to the Imminent and Substantial Endangerment Presented by the Bluewater Sites

Following the Division Director's approval of the Bluewater Action Memorandum on June 13, 1991, the Region sought concurrence on its proposed action from the EPA Office of Emergency and Remedial Response (OERR) in Washington, D.C. Pursuant to OSWER Directive 9360.0-19, Headquarters' concurrence was required in this case (which was considered "nationally significant") since the proposed removal was to be conducted partially on Indian lands and since the action involved mining and radiation issues. On July 26, the Director of OERR concurred on the Region 9 Action Memorandum. With Headquarters' approval in hand, the Emergency Response Section prepared to conduct the response action.

As discussed below, however, the type of action that EPA ultimately took in responding to the release and threatened release of hazardous substances at each of the Bluewater Sites was dependent on the ownership status of each affected parcel. EPA's overall response action at the Bluewater Sites is documented and described in the EPA Federal On-Scene Coordinator's Report: Bluewater Uranium Mine Sites; Prewitt, Navajo Nation, New Mexico; August 11 - September 19, 1991 (Attachment 5).

A. SUMMARY OF REMOVAL # 1: THE EMERGENCY RESPONSE CLEANUP ON THE DOE PARCEL

Under Executive Order 12580, which was signed by President Reagan on January 23, 1987, Executive agencies have been delegated the authority to conduct "non-emergency" removal actions at the Federal facilities under their jurisdiction. Furthermore, pursuant to Section 2(d) of the Executive Order, DOE and the Department of Defense have been delegated the additional

authority to conduct certain emergency removal actions at the facilities that are under their "jurisdiction, custody or control."

Based on the provisions of Executive Order 12580, EPA had limited authority to respond to the release and threatened release of hazardous substances on the Bluewater parcel that was administered by DOE.

In May 1991, EPA notified DOE of the significant health threat posed by the Bluewater Sites and the need for a response action to be conducted on the DOE portion of the Sites. DOE acknowledged that the land in question was under that Department's "jurisdiction, custody, or control," and therefore, that DOE was responsible for conducting the removal in accordance with the standards established by EPA.

In July 1991, DOE contacted George Warnock, the lessee of the mineral rights to the Site, with the apparent goal of having his company, Todilto Exploration and Development Corporation (TEDC), conduct and/or pay for the removal action at the Site. Thereafter, on July 15, the EPA issued a Notice of Potential Liability to Mr. Warnock, pursuant to §107(a) of CERCLA (Attachment 6). TEDC had operated both a surface pit mining and an underground mining operation at the DOE Site since 1975. Through its General Notice Letter, EPA requested that Mr. Warnock undertake specified cleanup actions with respect to the Site.

In response, Warnock sent a strongly worded letter to DOE on July 31, 1991, claiming that the DOE Site posed no threat to human health, and therefore, that DOE would have no jurisdiction for closing the open vents and shafts on the parcel. Warnock's letter further asserted that the closure of the openings by DOE in response to EPA's correspondence would constitute a "taking" of TEDC's property interest without just compensation.

In early August, DOE attempted to work with TEDC to gain that corporation's acceptance of its proposal to close the existing mine openings at the Site. TEDC responded, in part, by seeking a covenant not to sue from DOE. However, the Department would not agree to release the corporation from liability pursuant to the environmental requirements specified in its lease. As a result, the negotiations between the parties broke down, and on August 23, 1991, TEDC notified DOE that in addition to filing a "takings" claim against the Department, the firm would demand an administrative hearing on the issue of the closure of the mine shafts.

On September 11, DOE first notified EPA in writing that it had encountered "a potential legal problem with the corrective action to be performed" at the DOE Bluewater Site. At that time,

DOE concluded that "it would not be prudent for DOE to perform the corrective action as long as Todilto still has a leasehold interest in the property."

Thereafter, on October 25, 1991, the DOE responded to Mr. Warnock's inaction by raising TEDC's corporate performance bond under the lease to \$200,000, and demanding payment of the firm's unpaid royalties of \$40,000, for the period from 1988 through 1991. In a strongly worded letter to DOE on November 18, 1991, Mr. Warnock stated his refusal to comply with DOE's demands. In response to Mr. Warnock's correspondence, the DOE contract office determined on December 30, 1991 that TEDC was in breach of its lease, and thus ordered the lease cancelled.

On January 16, 1992, Mr. Warnock appealed the DOE contract officer's decision to the DOE Board of Contract Appeals (BCA). After many months of discovery and other legal proceedings, the BCA ultimately dismissed George Warnock's claim on August 8, 1992.

Thereafter, on October 20, 1992, the DOE entered into an Interagency Agreement with the EPA to procure emergency response site stabilization and mine reclamation services from the Agency. The cost to DOE was \$275,000. A full description of the activities conducted by EPA on the DOE parcel (which were consistent with the recommendations of the Interagency Task Force) is included in the Interagency Agreement Executed by EPA and DOE in October/November 1992 re: Mine Reclamation Services at the Department of Energy Bluewater Uranium Mining Site (Attachment 7). The EPA Federal On-Scene Coordinator's Report, Department of Energy, Bluewater Uranium Mine Parcel, Prewitt, New Mexico (Attachment 8), constitutes EPA's final report on the DOE Site.

A brief description of the services and activities performed by EPA on the DOE parcel (through a Native American construction contractor) is as follows:

EPA Services Performed

- 1) Conduct preliminary pre-cover 50' X 50' X 3' gamma ray survey, and create contour map;
- 2) Cover, grade, and slope all elevated gamma mining areas with clean fill and topsoil;
- 3) Backfill all adits with protore, then seal with concrete;
- 4) Backfill, then plug all mine vent shafts with concrete;
- 5) Provide OSHA air monitoring;
- 6) Slope and revegetate all disturbed ground surfaces;
- 7) Conduct post-cover Gamma Ray Survey (50' X 50' X 3') and create contour map; and
- 8) Provide biweekly progress reports and final report.

**B. SUMMARY OF REMOVAL # 2: THE EMERGENCY RESPONSE
CLEANUP ON THE PRIVATELY OWNED PARCEL**

In accordance with normal procedures, EPA conducted a search for Potentially Responsible Parties (PRPs) with respect to the Bluewater Sites in early 1991. Based on the evidence obtained during that search, EPA determined that the Santa Fe Pacific Railroad Company (SFPR) and several predecessor and/or related corporations, including the Atchison, Topeka, and Santa Fe Railway Company (ATSF) and the Cerrillos Land Company, had owned either the surface rights or the mineral rights to a portion of the Bluewater Sites from 1950 to the present time. Based on this conclusion, EPA issued a Notice of Potential Liability pursuant to Section 107(a) of CERCLA to the Santa Fe Pacific Mining Company on June 19, 1991 (Attachment 6).

After approximately two months of discussions regarding SFPR's liability and corporate history, EPA issued a Unilateral Administrative Order to the three related corporations on July 29, 1991, pursuant to Section 106 of CERCLA. See Attachment 9. That Order required the Respondents to take prompt action (consistent with the recommendations of the Task Force) to: (1) define and delineate all areas within the Site where radiation emissions exceeded a specified level; (2) develop and implement a plan to reduce all such emissions to an approved level; and (3) post warning signs to advise area residents of the radiological hazards posed by the Site.

Cerrillos Land Company (CLC) accepted the role of lead PRP and agreed to comply with the EPA §106 order. CLC submitted its work plan to the EPA On-Scene Coordinator on August 25, 1991. The work plan was subsequently revised and later approved on August 30, 1991. On August 30, 1991, CLC mobilized its contractor, Taylor Excavation Company. EPA provided emergency response oversight during the PRP cleanup.

Beginning on September 4, 1991, Taylor Excavation Company followed the approved work plan and conducted the necessary earth moving activities to reduce the gamma radiation to below 50 Ur/hour. Taylor completed its cleanup and remediation activities at the Site on October 23, 1991.

**C. SUMMARY OF REMOVAL # 3: THE EMERGENCY RESPONSE
CLEANUP ON THE THREE NATIVE AMERICAN ALLOTTEE PARCELS**

Based on the agreement reached by the Interagency Task Force, EPA conducted a separate PRP investigation with respect to the allotted parcels at the Bluewater Sites. In this investigation, the EPA staff conducted an extensive document search through the McKinley County Records Office Land Records, the New Mexico Bureau of Mines and Mineral Resources archive files, and the Bureau of Indian Affairs Realty Area Office files and

archived files. EPA investigators also conducted interviews with Virginia T. McLemore of the New Mexico Bureau of Mines and Mineral Resources; William Chenoweth, an Atomic Energy Commission historian; several DOE officials; and representatives from both the New Mexico Secretary of State's office and the New Mexico Corporate Commission. The following companies were identified by EPA as having an historic mining connection with the three Native American allotments in question:

Sutton-Thompson-Williams Mining Company
Williams Mining Company
Federal Uranium Company of Utah
Mesa Mining Company
Cibola Mining Company
Glen Williams Mining Company
Amiran Limited Mining Company
Hanosh & Mollica Mining Company
Santa Fe Uranium Company (not to be confused with Santa Fe Pacific Mining Company)

A subsequent EPA investigation revealed that none of the above-referenced mining companies were solvent at the time of the planned response effort. In addition, none of those firms were presently listed in the various state and commercial corporate data bases such as those maintained by the New Mexico State Corporate Commission, Prentice Hall's "On line" Public Information Service, and the Dunn & Bradstreet, Inc. Consolidated Report. Based on the available information, EPA and DOI soon realized that no viable PRPs could be identified with respect to the Sites. Therefore, the agencies recognized that they would have to work together to conduct and pay for the cleanup of the allotted parcels.

1. EPA's Efforts to Negotiate an Interagency Agreement with BIA

As indicated above, in January 1991, DOI and EPA began to work cooperatively together to address the health and environmental hazards posed by the Bluewater Sites. Specifically, the two agencies worked closely together to determine the extent of endangerment which the Bluewater Sites posed to nearby residents, and thereafter, to design and implement reclamation activities at the Sites. During the Site assessment process, DOI representatives assured EPA on several occasions that the Department would make a financial contribution to the remediation of the allotted parcels, paying roughly half of the response costs to be incurred at those Sites. In making these representations, the DOI staff referred on several occasions to the Department's funding authority under the provisions of the Snyder Act, 25 U.S.C. Section 13. EPA, in turn, assured DOI that it would perform the entire Site cleanup, and pay for the remaining half of the response costs pursuant to the provisions of CERCLA.

During late spring of 1991, the EPA Region 9 and DOI staff tentatively agreed to develop and utilize an Interagency Agreement as a vehicle for specifying each agency's role and responsibilities with respect to the proposed removal action. After several months of discussions regarding the specific terms of an IAG, EPA Region 9 sent a draft agreement (which was based largely on language developed by DOI) to the Department on July 15, 1991. In an accompanying letter to Mr. John Schrote, Assistant Secretary Designate for Policy, Management, and Budget, Region 9 formally requested that DOI "assist EPA by providing financial support" for EPA's proposed response activities on the Bluewater allotted parcels (Attachment 10).

While the Bluewater Interagency Agreement was being transmitted to DOI Headquarters in Washington, D.C., the EPA On-Scene Coordinator was mobilizing the EPA Emergency Response Team and the Regional Engineering and Analytical Contractor. From EPA's perspective, autumn was fast approaching, and therefore, the amount of time that would be available to revegetate the land following Site remediation was dwindling with each passing day. In light of the time pressure brought to bear by the upcoming change of season, by mid-July EPA was finalizing the LCC Construction Company contract, and all emergency response timetables were drawn up and approved at this time. During this period, ATSDR and the Navajo Nation Superfund Office also began to implement their Community Health Education program with respect to the Site, and the families who lived in the mining areas were informed that a removal action was imminent. In addition, by this time, members of the regional and national media had begun to focus some attention on the environmental equity issues presented by the Site.

From mid-July through early August, EPA continued its efforts to finalize negotiations involving the IAG. In this regard, EPA attempted to be as responsive as possible to liability concerns that were then raised by the Department's regional staff. Most notably, EPA did not ask DOI to share in the cost of the response action, or acknowledge liability in any way, based on the provisions of CERCLA or other environmental statutes. Rather, EPA tried to respond to DOI's concerns by adding specific language to the IAG which referenced the Department's funding authority under the Snyder Act, in lieu of CERCLA. Furthermore, at a latter stage of negotiations, EPA offered to revise the IAG to incorporate any alternate language that DOI might suggest. Regrettably, however, these efforts on the part of EPA were apparently not sufficient to enable DOI to sign the proposed agreement.

2. EPA Decides to Proceed With the Removal Action After DOI Declines to Participate in Site Response Activities

As indicated above, during its ongoing discussions with DOI, EPA was subject to increasing pressure to take prompt and effective response action to abate the imminent and substantial hazard that the Bluewater Sites continued to pose to public health and the environment. Throughout the period in which most of these discussions occurred, EPA believed that DOI was interested in sharing responsibility for the response costs at Bluewater, and that the IAG negotiations would ultimately yield an agreement that would be acceptable to both agencies.

However, in a conference call on August 1, 1991, several representatives from DOI headquarters informed EPA that they had neither heard of nor approved of the Bluewater IAG prior to EPA's transmittal of that document in Region 9's July 15 letter to John Schrote. Furthermore, they indicated during the call that DOI would not agree to participate as a signatory to the proposed IAG. Instead, the Department proposed that DOI (rather than EPA) be allowed to perform the planned removal activities on the allotted Bluewater parcels.

After considering DOI's proposal, Region 9 stated that it was open to having DOI conduct the removal action on the allotted parcels in lieu of EPA. However, since Region 9 had planned to mobilize its contractor during the early part of the following week (August 5-9), EPA stated unequivocally that if DOI wanted to perform the response work in question, it would need to: (1) make a firm commitment to do so by August 5; and (2) begin the necessary work on or about August 12, to avoid further delay and endangerment of the local population. Finally, Region 9 indicated that if DOI could not provide the required assurance (to conduct the removal action) by August 5, EPA would proceed with its previous plan to conduct the response activities on the allotted portion of the Bluewater Site.

The EPA has responsibility under the National Contingency Plan to determine the willingness and the capability of a party to respond to a release. As indicated above, on August 1, 1991, EPA gave DOI five days to commit to, and provide EPA with a cleanup plan for, the response action to be conducted by DOI on the three allotted parcels at Bluewater. However, the August 5th deadline arrived and passed with no response from DOI. Thereafter, when EPA finally spoke with a DOI representative on August 6, the Department still could not make a firm commitment to initiate the work at the Site promptly. Instead, EPA was then informed that due to budget constraints, DOI would need to obtain funding approval from Congress in the form of a line item budget increase before it could commit to perform the work in question. While the DOI representative estimated that DOI could probably obtain such funding approval within one to two weeks, EPA simply

had no assurance during the critical week of August 5-9 that DOI would be able to initiate the proposed response action within a reasonable time frame, given the fast approaching winter season.

Thereafter, one day before the site mobilization effort was to commence, EPA received a faxed letter from Mr. Ed Cassidy, DOI's Deputy Assistant Secretary for Policy, Management, and Budget (Attachment 11). Mr. Cassidy's letter indicated that DOI was willing to undertake certain cleanup activities at the Bluewater Sites, pursuant to the authority of the Snyder Act. However, the letter specified that DOI's response would be based on that agency's interest in eliminating certain safety hazards (i.e., open mine shafts and pits), and thus implied that DOI would not otherwise respond to the serious radiation hazards posed by the Site. Moreover, Mr. Cassidy's letter indicated that the Department bore no responsibility or liability under CERCLA in connection with the Bluewater Site. Mr. Cassidy underlined this point in his letter and cited two legal cases in support of his position.

By the time EPA received Mr. Cassidy's letter, Region 9 was finalizing its plans for the proposed removal action. Mr. Cassidy's letter did not give EPA any reason to cease its preparations for the planned response action, since that letter did not voice a clear commitment on the part of DOI to undertake the necessary response action within the required timeframe. Moreover, as indicated above, the scope of the cleanup activities that DOI stated that it was willing to undertake appeared to have narrowed considerably between the time of Region 9's last telephone discussions with DOI and the date of Mr. Cassidy's letter.

Since DOI had not agreed to perform all of the response activities specified in the EPA Action Memorandum, and since Region 9 had no assurance that DOI would be able to undertake any removal action expeditiously at the Site, EPA felt that it had little choice at that time but to proceed on schedule with the proposed removal action. Given the serious health hazards that the Site continued to pose to nearby Navajo residents, and the need for prompt action to abate those hazards prior to the onset of the winter season, Region 9 proceeded to finalize the Site mobilization schedule, and commenced the emergency response action for the allotted parcels five days later, on August 11, 1991. EPA's rationale for conducting the response action (in lieu of waiting for DOI's funding approval) was discussed in detail in a reply letter from EPA to Ed Cassidy, dated October 2, 1991 (Attachment 12). That letter also continued to seek DOI's participation in an IAG, to provide financial assistance for the Bluewater response activities. Unfortunately, however, Region 9 has yet to receive a reply to its October 1991 letter to DOI. As discussed below, EPA successfully completed the cleanup on the allotted parcels by late September 1991.

3. The Conduct of the Removal Action for the Allotted Parcels

During the June 3 Interagency Task Force meeting, DOI had apprised the EPA On-Scene Coordinator of the availability and unique expertise of the Laguna Construction Company (LCC), which is a wholly-owned Native American construction company. LCC was established with the assistance of the Pueblo of Laguna and the BIA. LCC had significant experience in mine reclamation and was then concluding a mine reclamation project at the Jackpile Uranium Mine, which was the world's largest open-pit uranium mine. In its work at Jackpile, LCC had built up an outstanding track record, successfully moving over 11,800,000 cubic yards (350 billion pounds) of earthen material. In addition, DOI pointed out that LCC was a wholly-owned, small, minority business. Soon after DOI's timely referral, EPA entered into a site-specific contract with Laguna Construction for the Emergency Response Action on the Bluewater allotted parcels.

PHASE 1:

Phase 1 activities commenced on August 12, 1991. Rob Bornstein, the EPA On-Scene Coordinator; Art Ball, the representative from the EPA Emergency Response Team (ERT) in Cincinnati; and Jerry Gaels and Ken Munney from REAC (the EPA Regional Engineering and Analytical Contractor) laid out 50-foot grids over all of the exposed mining pits and overburden piles within Sections 18, 24, and 26. Ground level and waste level readings were collected. Next, LCC performed a ground contour survey. That information was collated, and a working contour map was then created.

PHASE 2:

Phase 2 activities commenced on August 19, 1991. LCC mobilized its heavy reclamation equipment and began to push and cut the large piles of overburden material with their D-9 dozers. Clean fill (with gamma readings of less than 20 Ur/hr) was stockpiled and used as final cover material. Large mined-out uranium pits and all open adits were first filled to slightly below grade and sampled to assure that gamma levels were below 50 Ur/hr. Once the desired gamma level was achieved, each area received a final cover suitable for revegetation and was then recontoured to achieve proper drainage. Utilizing the reclamation scheme described above to reduce gamma radiation emissions and potential radionuclide migration, LCC completed the removal work on Section 24 on August 27, 1991; the work on Section 18 on August 27, 1991; and the work on Section 26 on September 18, 1991. LCC demobilized on September 19-20, 1991. A detailed summary of the Site response activities performed by LCC is contained in the EPA Federal On-Scene Coordinator's Report, Bluewater Uranium Mine Sites, Prewitt, Navajo Nation, New Mexico, August 11 - September 19, 1991 (Attachment 5), at pages 24-32.

PHASE 3:

Phase three activities commenced in early September 1991 with the posting of multilingual "Radiation Warning Signs." Signs written in Navajo, Spanish, and English were placed along the perimeter of each reclaimed area. Thereafter, on September 18, 1991, EPA's subcontractor, the James Ranch company, began to conduct revegetation activities. Each reclaimed area was disked and drill seeded using a mixture of native grasses. James Ranch completed its work and demobilized by September 21, 1991. The total area reseeded in this phase was 70 acres.

ATTACHMENTS TO ENCLOSURE 1

DETAILED BACKGROUND REGARDING EPA'S RESPONSE EFFORT AT THE BLUEWATER SITES

- Attachment 1 Agency for Toxic Substances and Disease Registry
Public Health Advisory; dated November 21, 1990

- Attachment 2 EPA's Preliminary Assessment Gamma Survey and
Laboratory Data Report for the Bluewater Sites

- Attachment 3 DOI Memorandum dated May 24, 1991: Invitation to
Meeting on Abandoned Uranium Mines, Navajo Lands,
June 3, 1991, Grants, New Mexico; Draft Agenda;
Agenda for the Meeting; and Attendance Roster

- Attachment 4 EPA Memorandum dated June 7, 1991: Request for
Removal Action Approval at the Bluewater Uranium
Mine Sites, Prewitt, Navajo Nation, New Mexico

- Attachment 5 EPA Federal On-Scene Coordinator's Report,
Bluewater Uranium Mine Sites, Prewitt,
Navajo Nation, New Mexico, August 11 -
September 19, 1991

- Attachment 6 EPA General Notice Letters Issued Pursuant to
Section 107(a) of CERCLA, Informing Parties of
Their Potential Liability With Respect to the
Bluewater Sites

- Attachment 7 Interagency Agreement Executed by EPA and the
Department of Energy in October/November 1992:
Mine Reclamation Services at the Department of
Energy Bluewater Uranium Mining Site

- Attachment 8 EPA Federal On-Scene Coordinator's Report,
Department of Energy, Bluewater Uranium Mine
Parcel, Prewitt, New Mexico, Site ID 6M;
dated December 14, 1992

- Attachment 9 EPA Administrative Order Issued to the
Cerrillos Land Company, the Santa Fe Pacific
Mining Company, and the Atchison, Topeka and
Santa Fe Railway Company Pursuant to Section
106 of CERCLA; dated July 29, 1991

- Attachment 10 EPA Letter to Mr. John Schrote, Assistant
Secretary Designate for Policy, Management
and Budget, Dated July 15, 1991, re:
Interagency Agreement, Bluewater Uranium
Mine Sites, Prewitt, New Mexico

- Attachment 11 Department of Interior Letter from
Mr. Ed Cassidy, Deputy Assistant Secretary -
Policy, Management and Budget, to
Jeff Zelikson, Director of the EPA Region 9
Hazardous Waste Management Division,
Dated August 7, 1991
- Attachment 12 EPA Letter Responding to Mr. Cassidy's
August 7, 1991 Correspondence, Dated
October 2, 1991